SPENVIS

New developments and future work…
Contents

- SPENVIS 5.0: new interface developments
- SPENVIS installation kit for Windows
SPENVIS 5.0: New interface developments

- The SPENVIS 5.0 interface will be completely written in PHP.
  - Object oriented
    - Easy to maintain or modify
    - Easy to extend
  - Well documented
SPENVIS 5.0: New interface developments

- For the users:
  - Updated layout
  - Better navigation possibilities including an expandable navigation menu on the left
  - Easier to work with
SPENVIS 5.0: New interface developments

- For the developers:
  - More flexible environment
  - CGI script will be replaced with PHP classes that allow running models and making plots
  - Layout classes that provide the layout template, including the expandable navigation menu on the left
SPENVIS 5.0: New interface developments

- Implemented interfaces:
  - Spacecraft trajectories (SAPRE)
  - Coordinate grid generator (GRID)
  - Trapped Radiation Models
    - Proton Models
      - AP-8 (developed by NSSDC)
      - CRRESPRO (developed by Air Force Research Lab)
      - SAMPEX/PET PSB97 (developed by BIRA)
    - Electron Models
      - AE-8 (developed by NSSDC)
      - CRRESELE (developed by Air Force Research Lab)
      - AE-8 MIN Update ESA-SEE1 (developed by A.L. Vampola)
Welcome Jan,

The models implemented in SPENVIS are combined in the packages listed in the menu on the left. Clicking on a package name will expand the menu with a list of models. Some model suites have to be executed in a prescribed order. Model links will not be available when pre-required runs have not been executed yet. Most models run on both a spacecraft trajectory and a geographical coordinate grid. Clicking on the coordinate generator links and returning to this page toggles between the two sets of coordinates. The model links will adapt to the choice of coordinates.

The model pages have deliberately been kept as concise as possible. A navigation bar is figured at the top of each SPENVIS page. The Help button in the bottom right hand corner of this bar points to context sensitive help pages, which in turn contain their own navigation system, including access to guidelines on model usage and background information on the space environment.

Please do not use your browser’s Back or Forward buttons (except for navigating in the help pages), as these actions do not save input parameters. Full navigation between model pages is available through the menu bar at the top of each page and the action buttons featured on each page.

For additional assistance (after consulting the help pages) and feedback, please contact the SPENVIS team.
Screenshots
Screenshots
Screenshots
SPENVIS 5.0: New interface developments

Future work:

- Redesign of the top bar:
  - Integrate the navigation buttons into the navigation panel on the left
  - Provide tabs to switch between different projects
- Rewrite the other model interfaces in php
SPENVIS Installation kit

- Development of an interactive installation kit for Windows
  - Includes Apache 2.2 HTTP server
  - Makes the installation of the SPENVIS system a lot easier for the user:
    - Installation wizard
    - Detailed installation instructions
    - Extensive support through e-mail
SPENVIS Installation kit

What does it do?
- Copy the SPENVIS files to a user specified location on the hard disk
- Generates the SPENVIS configuration file
- Generates the Apache HTTP server configuration file
- Add shortcuts to the start menu and the desktop
Screenshots

Welcome to the SPENVIS 4.2.1 Setup Wizard

This wizard will guide you through the installation of SPENVIS 4.2.1.

It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.

Click Next to continue.
Screenshots

License Agreement

Please review the license terms before installing SPENVIS 4.2.1.

Press Page Down to see the rest of the agreement.

Disclaimer: The SPENVIS team and the model and data providers are not to be held responsible for the contents or the accuracy of the models in SPENVIS and the use of the results. It is the responsibility of the user to verify that the outputs are appropriate for his/her application.

All the material of SPENVIS (pages, concepts, help files, documentation, etc.), except the models developed by other institutions, is the property of the European Space Agency. The user should not copy (except for personal use) or sell this material without the permission of the SPENVIS team.

The user can not use SPENVIS in a commercial way. Only the interpretation of the results.

If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install SPENVIS 4.2.1.
Screenshots
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Screenshots
SPENVIS is a web based system and hence requires a web server to run. If no web server has been installed on your system, you need to install one before you will be able to use SPENVIS. We recommend the Apache web server since it’s widely used and free. The Apache web server version 2.0.55 is included on your SPENVIS installation CD in the apache directory as an MSI install file (apache_2.0.55-win32-x86-no_ssl.msi). You can also download it from the site http://www.apache.org.

SPENVIS uses RSI's Interactive Data Language - IDL (http://rsinc.com/idl) for producing graphical output. IDL requires a separate license. Alternatively, other plotting tools can be used by importing the output files produced by SPENVIS, which are all in ASCII comma separated format.

This installer has copied the SPENVIS files to your hard disk and generated the SPENVIS and Apache configuration files. There are still some things you need to do before you can start using the SPENVIS system:
Screenshots

Completing the SPENVIS 4.2.1 Setup Wizard

SPENVIS 4.2.1 has been installed on your computer.

Click Finish to close this wizard.
Screenshots
Future work:

- Make the installer more interactive:
  - Present to the user the question if he wants to install the Apache HTTP server
  - If the user chooses to install the Apache HTTP server, automatically spawn the installer
  - Automatically configure and restart the Apache HTTP server after it has been installed

- Include diagrams in the install guide